| Index of Claims | Application No. | Applicant(s)    |  |  |  |  |  |  |
|-----------------|-----------------|-----------------|--|--|--|--|--|--|
|                 | 10/630,487      | HYMEL, JAMES A. |  |  |  |  |  |  |
|                 | Examiner        | Art Unit        |  |  |  |  |  |  |
| 1881            | CongVan Tran    | 2683            |  |  |  |  |  |  |

| 1 | Rejected | _ | (Through numeral)<br>Cancelled | N | Non-Elected  | А | Appeal   |
|---|----------|---|--------------------------------|---|--------------|---|----------|
| = | Allowed  | ÷ | Restricted                     | 1 | Interference | 0 | Objected |

| Cla  | aim      | Date                                   |              |          |          |          | Claim Date |          |                 |          |          |          |                 | Claim Date     |          |          |          |          |   |           |    |          |            |           |                 |          |          |          |          |           |          |               |
|--|----------|--|--------------|----------|----------|----------|------------|----------|-----------------|----------|----------|----------|-----------------|----------------|----------|----------|----------|----------|---|-----------|----|----------|------------|-----------|-----------------|----------|----------|----------|----------|-----------|----------|---------------|
|  |          | [5                                     |              | Г        |          |          |            |          |                 |          |          | al       |                 |                |          |          | Т        |          |   |           |    |          | ਲ          |           |                 |          |          |          |          |           | -        |               |
| Final  | Original | 2/16/05                                |              | l        | l        | ļ        |            |          |                 |          | Final    | Original |                 | -              |          |          | -        |          | ļ   |           |    | Final    | Original   |           |                 | -        | -        |          | -        | - 1       | ı        |               |
| ιĒ   | Ä        | ž                                      |              |          | 1        |          | ĺ          |          | -               | 1        | i II     | اکّرا    | 1               | - 1            |          |          | -        |          |   | 1         |    | ΙŒ       | Ö          |           |                 | 1        | - 1      |          | 1        | -         |          |               |
| ļ  |          |  |              |          | L        | _        |            | $\Box$   | $\dashv$        | _]       |          |          | $\perp$         | 4              | 4        | 4        | _        | 4-       | _   | $\perp$   |    |          |            | _         | 4               | 4        | 4        | 4        | 4        | _         | $\dashv$ | 4             |
|  | 1        | 1                                      | <u> </u>     | _        | <u> </u> |          |            |          | _               | _        | ļ        | 51       |                 | _              | _        | _        | 4        |          | 4   | _         |    |          | 101        |           | 4               | 4        | 4        | 4        | -        | _         | 4        |               |
| <u> </u>   | 2        | П                                      | <u> </u>     | _        | _        | <u> </u> | Ш          | Щ        | _               | 4        |          | 52       | $\Box$          | 4              | 4        | 4        | +        | +        | -   | 1_        |    |          | 102        | -         | $\dashv$        | -        | -+       | $\dashv$ | -        | -         | -+       | ᅫ             |
|  | 3        | Ш                                      | ╙            | Ļ.,      | ╙        | <b>!</b> |            |          | _               | _        | -        | 53       | $\Box$          |                | 4        | 4        | -        | +        | +   |           |    |          | 103        | $\dashv$  | -               | $\dashv$ | $\dashv$ | $\dashv$ | -        | +         | $\dashv$ | 긕             |
| <u> </u>   | 4        | Ш                                      | ┡            | ┡        | ┞        | ┡        | Ш          |          | -               | 4        | -        | 54       | $\dashv$        | $\dashv$       | 4        | +        | +        | +        | +-  | $\vdash$  |    | <u> </u> | 104        | -         | -               | $\dashv$ | +        | 4        | -        | +         | $\dashv$ | $\dashv$      |
| <u> </u>   | 5        | Н-                                     | ┞            | ├        | ⊢        | ┡        | H          | $\vdash$ | 4               | _        | -        | 55       | $\dashv$        | -              | +        | +        | +        | ╀        | +   | ╁         |    |          | 105<br>106 | -         | $\dashv$        | $\dashv$ | -        | $\dashv$ | -        | +         | $\dashv$ | $\dashv$      |
| <u> </u>   | 6        | H                                      | ├-           | ├-       | -        | ├        | <u> </u>   | Н        | +               | 4        | -        | 56<br>57 | $\vdash$        | +              | $\dashv$ | +        | +        | ╁        | ╁   | -         |    |          | 107        | $\dashv$  | $\dashv$        | -        | +        | +        | ↤        | $\dashv$  | $\dashv$ | ᅱ             |
| ├  | 7        | ₩                                      | <del> </del> | -        | ⊢        | -        | ⊢          | $\vdash$ | +               |          | -        | 58       | $\dashv$        | $\dashv$       | +        | +        | +        | +        | ┿   | +         | ł  | $\vdash$ | 108        | $\dashv$  | ┽               | -+       | $\dashv$ | $\dashv$ | -        | +         | $\dashv$ | ᅱ             |
|  | 8        | ╂                                      | ╀            | ⊢        | ├        | ╁        | H          | $\vdash$ | +               | -        | <u> </u> | 59       | $\dashv$        | -              | ┰        | +        | ┿        | +        | ╁   | ╁         | l  |          | 109        | $\dashv$  | -               | +        | -        | $\dashv$ | $\dashv$ | +         | ┪        | ᅱ             |
|  | 9        | H                                      | ├            | -        | ⊢        | ╀        | -          | H        |                 | -        | -        | 60       | $\vdash$        | $\dashv$       | $\dashv$ | +        | +        | ╁        | +-  | +         | 1  | <u> </u> | 110        | $\vdash$  | $\dashv$        | -        | $\dashv$ | $\dashv$ | $\dashv$ | $^+$      | $\dashv$ | ᅥ             |
| <u> </u>   | 11       | H                                      | ╌            | -        | -        | ┢        | $\vdash$   | $\vdash$ | $\dashv$        | $\dashv$ | -        | 61       | Н               | $\dashv$       | $\dashv$ | -        | +        | ╁        | +   | 1         | ł  | <u></u>  | 111        | $\vdash$  | $\dashv$        | ┪        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$  | ᆉ        | ᅥ             |
| <del>                                     </del> | 12       | 1                                      | ┼-           | $\vdash$ | +-       | +        |            | $\vdash$ | $\dashv$        | $\dashv$ | -        | 62       | $\vdash$        | $\dashv$       | $\dashv$ | $\dashv$ | +        | +        | +   | +         | ł  | <b>-</b> | 112        | $\vdash$  | $\dashv$        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$  | $\dashv$ | $\dashv$      |
| $\vdash$   | 13       | +                                      | ╁            | $\vdash$ | +        | +        |            | $\vdash$ | $\dashv$        | $\dashv$ | <b>—</b> | 63       | $\vdash \vdash$ | $\dashv$       | $\dashv$ | 十        | +        | +        | +   | +         | 1  | $\vdash$ | 113        | H         | -               | 十        | $\dashv$ | $\dashv$ | -        | $\dashv$  | $\dashv$ | $\dashv$      |
| -  | 14       | $\vdash$                               | ╁            | $\vdash$ | 1        | $\vdash$ | 1          | Н        | $\dashv$        | $\dashv$ |          | 64       | $\vdash$        | -              | 十        | $\dashv$ | 十        | +        | +   | $\dagger$ | 1  |          | 114        | $\vdash$  | $\dashv$        | 7        | 7        | 7        | $\dashv$ | 十         | 一        | ᅱ             |
| $\vdash$   | 15       | $\vdash$                               | t            | 1        | t        | $\vdash$ | t          | H        | -               | $\dashv$ | $\vdash$ | 65       | $\vdash$        | -              | $\dashv$ | $\dashv$ | 十        | $\top$   | +   | T         | 1  |          | 115        | $\square$ | 1               | 7        | 1        | $\dashv$ | _        | 十         | ┪        | ヿ             |
| <u> </u>   | 16       | $\vdash$                               | 1            | T        | †-       | 1        | $\vdash$   | Н        | $\dashv$        | $\dashv$ |          | 66       | H               | 一              | 寸        | 十        | 十        | +        | +   | 1         | 1  |          | 116        | $\Box$    | $\dashv$        | 一        | T        | 寸        |          | 寸         | ╛        | ᅵ             |
| <u> </u>   | 17       | t                                      | 1            | T        | T        | T        | $\vdash$   | Н        | $\vdash$        | $\dashv$ |          | 67       | $\vdash$        | 寸              | $\dashv$ | 十        | _        | $\top$   | $\top$  | T         | 1  |          | 117        | $\Box$    | $\dashv$        |          | T        | 一        | 一        |           | $\neg$   | ㅣ             |
| $\vdash$   | 18       | Т                                      | 1            | t        |          | T        | T          | П        |                 |          | -        | 68       | П               | ᄀ              |          | 寸        | T        |          |   |           | 1  |          | 118        |           | $\neg$          | $\neg$   | $\neg$   |          | T        | T         | П        | $\neg$        |
|  | 19       | T                                      | $\vdash$     | 1        | T        | T        |            |          | $\Box$          | $\neg$   |          | 69       | П               | T              |          | T        | 丁        |          | T   | 1         | 1  |          | 119        |           |                 | $\neg$   |          | Ī        | $\neg$   |           | $\Box$   |               |
|  | 20       | T                                      | ✝            | T        | T        | T        | 1          | П        |                 | $\neg$   |          | 70       | Ħ               |                | 一        | ↰        |          | T        |   |           | 1  |          | 120        | П         |                 | $\neg$   | $\neg$   |          | Ī        | Т         | $\Box$   |               |
| $\overline{}$                                    | 21       | 1                                      | T            | $\top$   | T        | 1-       | Т          | $\vdash$ |                 | 7        |          | 71       | i               | $\neg$         |          | 寸        | T        | T        | $\top$  | T         | 1  |          | 121        |           |                 |          | $\Box$   |          |          | П         | $\Box$   |               |
|  | 22       | $\top$                                 |              |          | T        | $\top$   |            |          | $\Box$          | $\neg$   |          | 72       |                 | $\neg$         | $\neg$   | $\neg$   | T        | $\top$   |   |           | ]  |          | 122        |           |                 |          |          |          |          |           |          |               |
|  | 23       | Т                                      | 1            |          |          | T        | T          | П        | П               | $\neg$   |          | 73       |                 |                |          |          |          | $\top$   |   |           | ]  |          | 123        |           |                 |          |          |          |          |           |          |               |
|  | 24       |  |              |          |          | Т        |            |          |                 |          |          | 74       |                 |                |          |          |          | $\perp$  | $\perp$   |           |    |          | 124        |           | $\Box$          |          | _        |          |          |           | _        | _             |
|  | 25       |  |              |          |          |          |            |          |                 |          |          | 75       | Ш               |                |          |          |          |          | $\perp$   | Ц.,       | 1  |          | 125        |           |                 | _        | _        | _        | _        | _         |          |               |
|  | 26       |  |              |          |          |          |            |          |                 | $\Box$   |          | 76       |                 |                |          | _ .      | _        | 4        | _   | ↓_        | ┨. |          | 126        | Ц         | Щ               |          | _        |          |          | _         | _        |               |
| L  | 27       | $\perp$                                | <u> </u>     | <u> </u> | ┖        | _        | 丄          | _        | Ш               | _        | <u> </u> | 77       | Ш               |                | _        | _        | 4        | _        |   | 1_        | 1. | L        | 127        | Ш         | Ц               | _        | 4        | _        | _        | 4         | _        | _             |
| L_   | 28       | _                                      | 1_           | Ļ        | 1_       | _        | 上          |          | $\Box$          | _        |          | 78       |                 |                | _        | 4        | _        | 4        | -   | ↓_        | 1  | <b>└</b> | 128        | Ш         | Ш               | _        | _        | $\dashv$ |          | -         | $\dashv$ | _             |
|  | 29       | <u> </u>                               | ــــ         | ↓        | ╄        | ↓_       | ┺          |          | Н               | _        |          | 79       | Ц               | $\dashv$       | _        |          | 4        | +        | +   | ┿         | 4  | <b>⊢</b> | 129        | _         | $\square$       | -        |          |          |          | $\dashv$  | ᆛ        |               |
| <u> </u>   | 30       | ــــــــــــــــــــــــــــــــــــــ | ↓_           | ╄        | ┺        | ↓_       | <u> </u>   | ļ        | Ш               | _        |          | 80       |                 |                | -        | 4        | -        | +        |   | 4         | 4  | <u></u>  | 130        | Н         | Н               |          | _        | -        |          | $\dashv$  | -        |               |
|  | 31       | 1                                      | ╄            | ╄        | ╀-       | ╄        | ╄          | <u> </u> | Н               | _        | <u> </u> | 81       | Н               | -              | $\dashv$ |          | $\dashv$ | +        | +   | +-        | ┨  | <u> </u> | 131        | H         | $\dashv$        | -        | -        | _        | _        | -         |          | $\dashv$      |
| <u> </u>   | 32       | 1                                      | 1            | +        | +        | +        | ـ          | <u> </u> | $\vdash \vdash$ | -        | -        | 82       | $\vdash$        | Н              |          | -        | $\dashv$ | +        |   | +-        | ┨  | <u> </u> | 132<br>133 |           | $\vdash \vdash$ | $\dashv$ | $\dashv$ | $\vdash$ | -        | -         | $\dashv$ | -             |
| <u> </u>   | 33       | ╀                                      | +            | +        | +        | +-       | ┼          | ₩        |                 | $\dashv$ | <u> </u> | 83       | $\vdash$        | Н              | $\dashv$ | $\dashv$ | +        | +        | +   | +         | -  | -        | 134        | $\vdash$  | $\vdash \vdash$ | $\dashv$ | $\dashv$ | $\vdash$ | $\dashv$ | $\dashv$  | $\dashv$ | -             |
| -  | 34       | ╁                                      | +            | +        | +        | +        | ╁          | ╀        | $\vdash$        | $\dashv$ | -        | 84<br>85 | $\vdash$        | $\vdash$       | $\dashv$ | $\dashv$ | -+       | +        | +   | +         | 1  |          | 135        | $\vdash$  | $\vdash$        |          | $\dashv$ |          | -        | $\dashv$  | $\dashv$ | -             |
| -  | 35       | ╀                                      | +-           | +        | +        | +-       | ╀          | -        | $\vdash \vdash$ | $\dashv$ | -        | 86       | Н               | $\vdash\vdash$ | $\dashv$ | $\dashv$ | $\dashv$ | +        | +-  | +         | 1  | -        | 136        | $\vdash$  | $\vdash$        | $\dashv$ | $\dashv$ | $\vdash$ | $\vdash$ | $\dashv$  | $\dashv$ | _             |
| -  | 36<br>37 | ╀                                      | ╀            | +        | +        | +-       | ╁          | +-       | $\vdash$        | $\dashv$ | -        | 87       | $\vdash$        | Н              |          | $\dashv$ | $\dashv$ | +        | +   | +         | ┨  | <u> </u> | 137        |           | $\vdash$        | $\dashv$ | ᅱ        | $\vdash$ |          |           | $\dashv$ | -             |
|  | 38       | ╁                                      | +            | ╁        | +        | +        | ╁          | 1        | ⊢┤              | $\dashv$ | -        | 88       | ╁┤              | Н              |          | $\dashv$ | +        | +        | +   | +         | ┨  | $\vdash$ | 138        | $\vdash$  | $\vdash$        | $\dashv$ | -        | $\vdash$ |          |           | $\dashv$ | _             |
|  | 39       | ╁                                      | +            | +-       | ╁        | +        | +          | $\vdash$ | -               | $\dashv$ | -        | 89       | Н               | $\vdash$       |          | $\dashv$ | $\dashv$ | +        | +   | +         | 1  | $\vdash$ | 139        | -         | $\vdash$        | -        | -        | -        |          | $\dashv$  | $\dashv$ | _             |
|  | 40       | +-                                     | +            | ╁╌       | +-       | +        | +          | $\vdash$ | $\vdash$        | $\dashv$ | $\vdash$ | 90       | $\vdash$        | Н              | $\dashv$ | $\dashv$ | -        | +        | +   | +         | 1  | -        | 140        | $\vdash$  | Н               | $\vdash$ | -        | H        | $\vdash$ | $\dashv$  | $\dashv$ | _             |
| $\vdash$   | 41       | ╁                                      | ╁            | +        | +        | +        | +          | $\vdash$ | $\vdash$        | $\dashv$ |          | 91       |                 | Н              | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | +-  | +         | 1  |          | 141        |           | Н               |          | _        |          |          | $\dashv$  | -        | -             |
| -  | 42       | ╁                                      | +            | ╁        | +        | +        | +-         | $\vdash$ | ╁               | $\dashv$ | $\vdash$ | 92       | $\vdash$        | Н              | $\dashv$ | $\dashv$ | +        | +        | +   | +         | 1  | -        | 142        | $\vdash$  | Н               | $\dashv$ | _        |          |          | $\dashv$  | $\dashv$ | _             |
|  | 43       |  | ╁            | +        | +        | +        | +          | $\vdash$ | Н               | $\dashv$ | <b>-</b> | 93       | $\vdash$        | Н              |          | $\dashv$ | $\dashv$ | 十        | +   | +         | 1  |          | 143        | Τ         | Н               |          | T        | $\vdash$ |          | $\exists$ | $\neg$   |               |
| <b>—</b>   | 44       | +-                                     | +            | +        | $\top$   | T        | T          | $t^{-}$  | H               | $\dashv$ |          | 94       | 1               | $\vdash$       | $\vdash$ | 一        | -        | 十        | $\top$  | T         | 1  |          | 144        |           | П               | $\dashv$ |          | П        |          | $\Box$    | $\neg$   | $\overline{}$ |
| <b>—</b>   | 45       | T                                      | T            | +        | T        | T        | $\top$     | $\vdash$ | Н               | $\dashv$ |          | 95       | T               |                | H        | $\dashv$ | 一        | 十        | $\top$  | $\top$    | 1  |          | 145        | $\vdash$  | П               | $\Box$   |          | П        | П        | П         | $\neg$   |               |
|  | 46       | T                                      | $\top$       | T        | +-       | +        | $\top$     | T        | $\sqcap$        | $\dashv$ |          | 96       | $\vdash$        | $\vdash$       | $\vdash$ | $\neg$   | 十        | 十        | 十   | $\top$    | 1  |          | 146        | T         | П               | $\dashv$ |          | П        | Т        | $\vdash$  | $\neg$   |               |
|  | 47       | T                                      | T            | 1        | T        | T        | T          | $\vdash$ | $\sqcap$        | $\dashv$ |          | 97       |                 | $\Box$         | $\Box$   |          | 一        | $\top$   | $\top$  | Ť         | 1  |          | 147        |           | П               | $\sqcap$ |          | $\Box$   | $\Box$   | $\Box$    | $\neg$   |               |
|  | 48       |  | T            | T        | 1        | 1        | 1          | $\vdash$ | П               | $\neg$   |          | 98       | Γ               | П              | П        | 寸        | 1        | $\top$   | $\top$  | Τ         | 1  |          | 148        | Π         | П               |          |          | П        |          | $\sqcap$  | $\neg$   | Π             |
|  | 49       | Т                                      | $\top$       | $\top$   | $\top$   | 1        | 十          | 1        | П               |          |          | 99       |                 |                |          |          |          | _        |   | Ι         | ]  |          | 149        |           |                 |          |          |          |          |           |          |               |
|  | 50       | I                                      | I            |          | L        |          |            | Г        |                 |          |          | 100      |                 |                |          |          |          | $\Box$   | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$ |           | ]  |          | 150        |           |                 |          |          |          |          |           |          |               |